L. D. MORTON.

HANDLE ATTACHMENT FOR PAPER BOXES.

APPLICATION FILED APR. 6, 1914.

1,158,707. Patented Nov. 2, 1915.

Fig. 1.

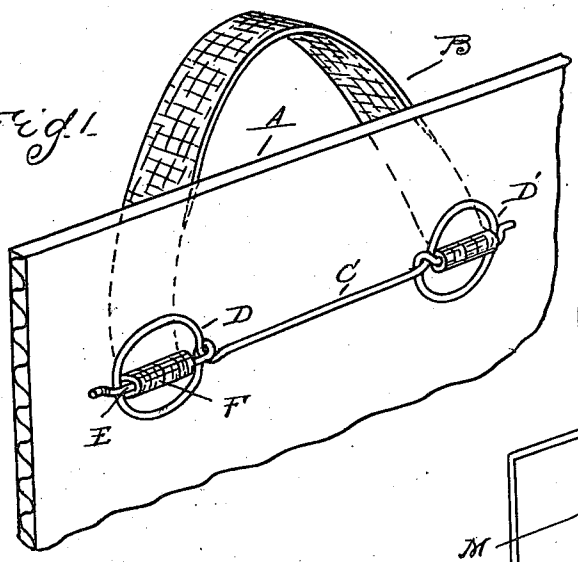



Fig. 6.

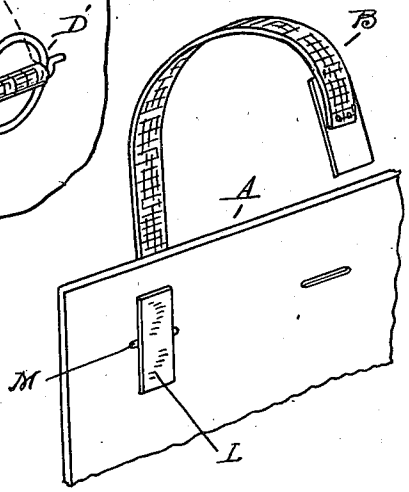



Fig. 2.

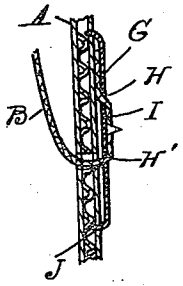



Fig. 3.

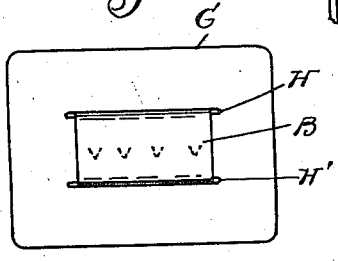



Fig. 5.

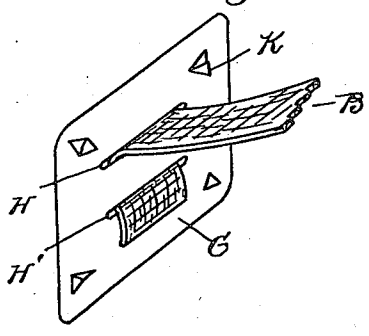
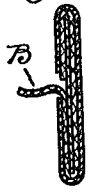



Fig. 4.




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# UNITED STATES PATENT OFFICE.

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## HANDLE ATTACHMENT FOR PAPER BOXES.

1,158,707. Specification of Letters Patent. Patented Nov. 2, 1915.

Application filed April 6, 1914. Serial No. 830,024.

*To all whom it may concern:*

Be it known that I, LAWRENCE D. MORTON, a citizen of the United States of America, residing at Sandusky, in the county of Erie and State of Ohio, have invented certain new and useful Improvements in Handle Attachments for Paper Boxes, of which the following is a specification, reference being had therein to the accompanying drawings.

The invention relates to paper boxes designed for use in the shipment of freight and for similar purposes, and it is the object of the invention to provide a handle which can be attached without danger of tearing the paper at the attachment point.

In the drawings:—Figure 1 is a perspective view of one construction of my improved handle attachment; Fig. 2 is a section, and Fig. 3 is an elevation showing a modified construction; Fig. 4 is a section through another modification; and Figs. 5 and 6 are perspective views of still other modifications.

A is a section of a paper box, which, as shown, is formed of cellular paper board.

B is a handle secured to the box and formed of a tape or other flexible material of sufficient strength.

To attach the tape B to the box without overstressing the material at the point of attachment so as to endanger tearing, I have provided means for distributing the stress over a relatively large surface. This, as shown in Fig. 1, consists of a wire C, which is bent to form circular loops D D′ at the opposite ends thereof, each having a cross bar E formed by the end portion of the wire. The tape B is formed with loops F at its ends which are first inserted through slits in the paper board and are then sleeved over the cross bar portion E of the wire. When a tension is placed on the tape, this will draw the wire frame against the side of the board, and on account of the relatively large area upon which the circular loops bear, the paper is not torn.

In Figs. 2 and 3, in place of providing a wire frame for engaging loops on the end of the tape I have formed a sheet metal bearing plate G, which is provided with double slits H H′, with an intermediate cross-bar I having pointed teeth struck-out therefrom. This permits of engagement with the tape after the latter has first been passed through the slit in the paper, the end portion of the tape being drawn through the slits H H′ and engaged with the teeth of the cross-bar I, which prevents slipping. The size of the plate G is sufficient to cover a relatively large area of the paper surface, and slightly inturned flanges J form a bearing which will press into the surface of the paper and prevent slipping.

In Fig. 4, the attachment is formed by folding a piece of sheet metal to engage the end portion of the tape, and Fig. 5 is a construction similar to Fig. 2, but provided with points K for pressing into the paper surface.

With all of the various modifications, the contacting portion of the securing member is separated from the paper immediately adjacent to the slit through which the tape passes and consequently the draft of the tape will not tend to tear the paper.

My device is particularly adapted for quick attachment to any form or construction of box, requiring no skill or the use of any tools other than a knife or some other instrument for forming the slit in the paper.

In the modified construction shown in Fig. 6 the end of the tape B is attached centrally to a bar L, which is insertible through the slit M and may then be turned to extend transversely and bear upon the paper on opposite sides of the slit.

What I claim as my invention is;—

1. An attachable handle for paper boxes, comprising a tape or flexible loop adapted for insertion through a slit in the paper, and an attachable member comprising a sheet metal plate having a toothed cross-bar, said toothed cross bar adapted to receive and secure the inserted tape ends and marginal bearings on the detachable member for resting against the paper.

2. An attachable handle for paper boxes, comprising a tape adapted for insertion through a slit in the paper, a struck-up sheet metal member having a separated pair of slots forming a cross-bar with struck-up teeth from the latter for securing the inserted ends of the tape, the margin of said plate being provided with turned-in flanges for the purpose described.

3. An attachable handle for paper boxes, comprising a tape or flexible loop adapted

for insertion through a slit in the paper, and an attachable member comprising a sheet metal plate having spaced parallel slots therein forming a cross bar, said bar having both of its ends integral with the plate and provided with outstanding teeth adapted to receive and secure the inserted tape end, and anti-slipping means carried by said plate being adapted to engage the box to prevent slipping thereof relative to the box.

In testimony whereof I affix my signature in presence of two witnesses.

LAWRENCE D. MORTON.

Witnesses:
G. STORMS,
PETER KLOTZ.